BMJ Open Quality

Provider engagement in Indiana's opioid use disorder ECHO programme: there is a will but not always a way

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To cite: Agley J, Henderson C, Adams Z, *et al*. Provider engagement in Indiana's opioid use disorder ECHO programme: there is a will but not always a way. *BMJ Open Quality* 2021;**10**:e001170. doi:10.1136/bmjoq-2020-001170

► Additional supplemental material is published online only. To view, please visit the journal online (http://dx.doi.org/10.1136/bmjoq-2020-001170).

Received 19 August 2020
Revised 24 March 2021
Accepted 3 April 2021

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INTRODUCTION

Project Extension for Community Healthcare Outcomes (ECHO) is an innovative means of expanding clinical providers' knowledge and skills using virtual case-based learning in a 'hub-and-spoke' network of providers and specialists.[1] Especially in rural and underserved areas, where healthcare needs are great and access to care may be limited, ECHO presents a promising continuing education model and way to facilitate management of complex cases.[2–5] It also provides clinicians with digital space for professional collaboration and shared learning, which is valuable in today's high-pressure practice environment[6] and can be rapidly deployed to address crises like the COVID-19 pandemic.[7] However, some practitioners have argued that administrative demands on time, rather than access to specialty knowledge, are the barrier to developing networks of providers for mutual education.[8] Other providers have noted that ECHO is likely not a 'panacea for access to specialty care,' but rather a 'force multiplier' for skills transfer.[9] It, therefore, is important to capture and disseminate quality improvement data to determine the ways in which ECHO programmes best can serve providers' specialty healthcare training needs.

Our multidisciplinary team started an ECHO for opioid use disorder (OUD) in Indiana, USA, in 2018. Each session was hosted on Zoom and lasted 90 min; the first 15 were a didactic presentation (eg, 'Neurobiology of OUD and MAT'), and the latter 75 were case-based learning, moderated by a panel of experts, focused on real, deidentified cases submitted in advance by participants. Our ECHO programme has facilitated extensive participation in shared, case-based learning on OUD, producing more than 1771 person-hours of attendance in the first year of operation alone, and has elucidated the need for statewide mentorship related to OUD and psychiatric comorbidities.[10] However, not all participants became regular ECHO attenders, so we surveyed low-attendance participants for programmatic quality improvement. The results of this microstudy highlighted barriers to provider engagement in continuing education and digital communities of practice.

METHODS

In 2018, we offered 2 OUD ECHO programmes for clinical providers, each consisting of 12 weekly 90 min sessions. For this report, our population of interest was providers who attended at least one session of ECHO, attended fewer than the mean numbers of sessions attended (m=5.2 and 5.8, respectively), and did not attend both programmes. The latter criterion was established prior to attendance review, and all but one dual-programme participant also attended more than five sessions. The total eligible population was 21 providers (figure 1).

Invitations to participate in a brief evaluation (five open-ended questions) hosted on Qualtrics were sent in three email waves; responses were incentivised by a US$20 digital Amazon.com gift card. The questions were informed by work by Salgia *et al*[11] and White *et al*[12] and were preceded with a statement to reduce social desirability bias.[13] The questionnaire was pilot tested with clinical providers (n=7) who were ineligible for the survey, including a mix of ECHO participants and team members. It was found to have face validity, except one question, which was adjusted for clarity prior to being fielded. All participants provided informed consent.

RESULTS

Of 21 eligible participants, 10 responded (47.6%) and 9 fully completed the survey (42.9%). Two authors reviewed and fully agreed on all major categorisations see (online supplemental file 1). Only questions

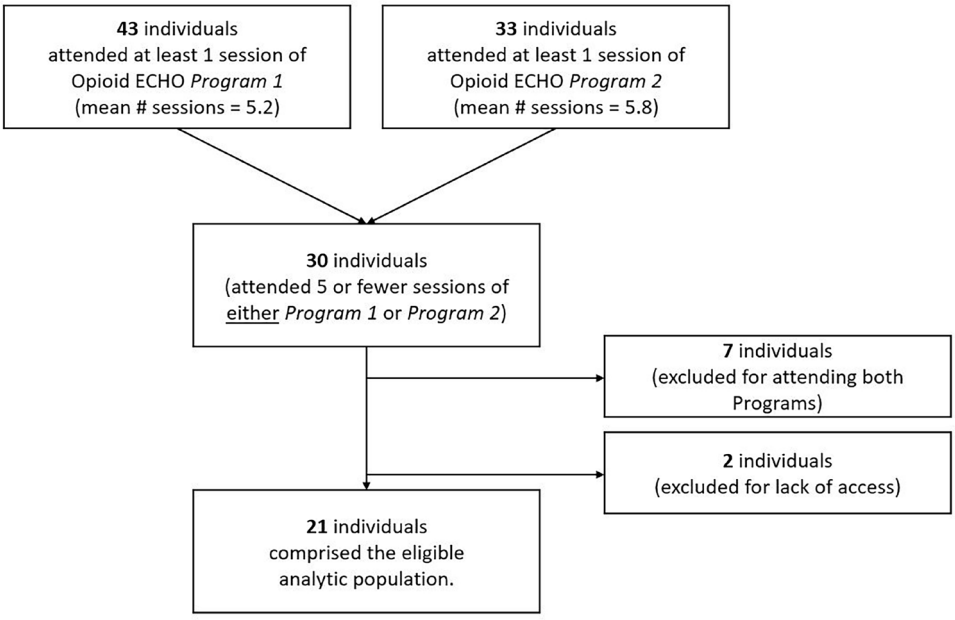

Figure 1 Determination of sample. ECHO, Extension for Community Healthcare Outcomes.

relevant to this topic were extracted for the short report. These were:

(1) In what ways did Indiana's Opioid ECHO sessions not meet your expectations?

Two providers indicated the programme met their expectations. Among those whose expectations were not met, providers noted that scheduling or timing was difficult (n=3), or that the programme did not match their level of expertise (n=2), should not emphasise active participation (n=1) or permitted too much non-medical talk (n=1).

(2) Please tell us the primary reasons why you stopped attending the Indiana Opioid ECHO.

Most respondents identified timing and scheduling as the primary reason they stopped attending (n=8), with some adding that our attempt to make scheduling easier by holding the session around lunchtime had the opposite effect (n=3). One respondent did not feel they had enough to add to the group.

(3) What changes, if any, could have been made to the Indiana Opioid ECHO that would have increased your likelihood of continuing to attend?

Most providers noted different or shorter periods of time (n=5) as the key change. Some (n=2, including one cross-code) preferred to watch videos of missed sessions. Others (n=3) shared unique recommendations, such as a group just for those 'just beginning' to manage OUD.

DISCUSSION

Infrequently attending Indiana OUD ECHO participants often were constrained by practical concerns (time/availability) rather than lack of interest or dissatisfaction with the ECHO model. This mirrors recent qualitative work indicating that external demands on time are a limiting factor for ECHO participation, though ECHO sessions were perceived as convenient and accessible.[14] While accessing high-quality specialty education on Zoom is clearly more time-efficient than travelling to an academic medical centre, especially for rural providers, even 90 min sessions may not always be possible to attend.

Care should be taken with generalising results from this report, given the small sample size and single evaluation site. However, following this study, our team began to publicly release didactic notes for all sessions and more deliberately created topic-specific 'tracks' on different days of the week (eg, sessions on neonatal abstinence syndrome are Monday, sessions on adolescent SUD prevention are on Friday). It is not clear that these quality improvement efforts fully addressed the issues described by participants, especially in terms of session duration, but case-based learning is the core of ECHO and complex case management cannot easily be truncated.

We recommend that researchers study modified approaches (such as recorded sessions for asynchronous learning) and upstream mechanisms of supporting ECHO participation (eg, policies or incentives for healthcare systems to support protected attendance time) for their potential to increase provider engagement. In the former case, however, it will be important to closely examine the degree to which case-based learning, a core facet of ECHO, can be achieved to a reasonable degree without synchronous interaction.

Contributors Concept and design: all authors. Acquisition, analysis or interpretation of data: JA and CH. Drafting of the manuscript: JA. Critical revision of the manuscript for important intellectual content: all authors. JA had access to all of the data in the study and takes responsibility for the integrity of the data and accuracy of the data analysis.

Funding Funding for the Indiana Opioid ECHO program in this short report was provided by the Indiana Division of Mental Health and Addiction, grant #18-002.

Competing interests None declared.

Patient consent for publication Not required.

Ethics approval This study was originally conducted as a quality improvement evaluation. This academic write-up was not deemed to be human subjects research per the Indiana University IRB (#2008399720). However, signed informed consent (digital) was nonetheless collected from participants.

Provenance and peer review Not commissioned; externally peer reviewed.

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Table A. Exemplar quotes for results

Question	Category	Exemplar(s)
In what ways did Indiana's Opioid ECHO sessions not meet your expectations?	Timing/Scheduling	"It was hard for me to get to all of them since 12N was over my lunch hour and sometimes I ran over seeing patients and couldn't participate." "Through no fault of their own, I have simply had a schedule change that has prevented me from attending more sessions."
	Didn't Match Expertise	"Sometimes, the expert inputs seemed a little simplistic." "I didn't feel like I benefited. I had no experience in treatment of opioid abuse."
	Other	"Would prefer to be a passive participant but active participation is encouraged." "Occasional non-medical, general time consuming talk."
Please tell us the primary reasons why you stopped attending the Indiana Opioid ECHO.	Timing/Scheduling	"My FT position started doing Wednesday weekly huddle meetings at the same time so I could no longer spend my lunch break tuning in." "I just cannot block my schedule for the 90 min session at this point; however, I will continue to try to find a creative solution so that I can attend again. I really miss these."
	Other	"I did not feel that I had enough knowledge to contribute to the group."
What changes, if any, could have been made to the Indiana Opioid ECHO that would have increased your likelihood of continuing to attend?	Different or Shorter Timeframe for Sessions	"When it is offered. For me, early morning or late afternoon would work better." "Make less frequent and ideally choose a different time."
	Allow Asynchronous Review	"If the meetings could be archived so I could watch later in case I couldn't attend that day." "Different times [cross-coded with above] or recorded sessions to tune in and watch later."
	Other	"Maybe a group for those just beginning and wanting to learn more about management of opioid abuse." "Review of pharmacology of medications at each meeting, brief synopsis, and any change in guidelines." "Patient specific treatment presentations are useful; treating methamphetamine addiction is a huge issue: no suboxone equivalent for meth, it's behavioral and prevalent; difficulty obtaining psychiatric referrals for many psychiatric co-morbid disorders; no psychiatrists available in [Redacted]."